# Ev Electro-Voice® MUSIC MICROPHONES



## Hypercardioid Dynamic Vocal Microphone

The Electro-Voice N/D457 is a hypercardioid dynamic microphone utilizing a revolutionary neodymium alloy to form the EV-exclusive N/DYM® magnet with four times the power potential of conventional microphone magnets. With a computer-optimized design, the N/DYM magnetic structure is maximized in the N/D457 to provide up to 6-dB more output sensitivity over conventional designs while the more uniform magnetic field lowers distortion during peak sound pressure levels.

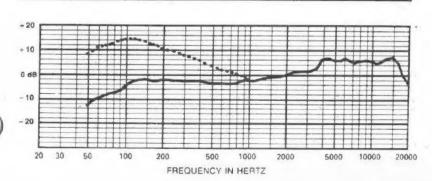
The large diaphragm contains 50 percent more surface area than conventional designs and is reinforced to prevent "breakup." The result is an extended high-frequency response with an open, transparent sound quality.

The exceptional sensitivity of the N/D457 combined with the inherently low noise of a dynamic transducer insures a superior signal-to-noise ratio ready for digital recording and sampling. To further reduce noise, a highly effective hum-bucking coil is used to cancel hum from lighting and other sources.

The N/D-Series design also features a unique shock mount totally surrounding the microphone element. Combined with the elastomeric Warm-Grip™ handle and windscreen bumper, this vibration-isolation system greatly reduces all forms of handling noise. An Acoustifoam™ pop filter is included to reduce both wind noise and "p-pop" breath sounds.

The uniform hypercardioid polar pattern of the N/D457 insures superior gain-before-feedback in live applications and better isolation in the studio—at all frequencies—compared with other directional microphones with widely varying polar characteristics.

#### FREQUENCY RESPONSE





#### SPECIFICATIONS

Frequency Response,

Close Response: 25 to 21,000 Hz Far Response: 55 to 18,000 Hz

Polar Pattern: hypercardioid

Open Circuit Voltage:

3.1 mV/Pascal @ 1000 Hz

Sensitivity:

-50 dB (where 0 dB = 1 mW/10 dynes/cm2)

Dynamic Range:

144 dB

Equivalent **Output Noise:** 

14 dB

(0 dB = .0002 dyne/cm2)

Impedance:

150 ohms balanced (Lo-Z)

Weight:

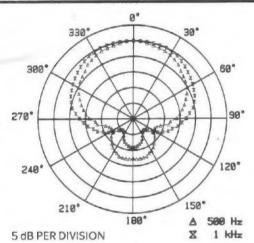
7.05 ounces (200 grams)

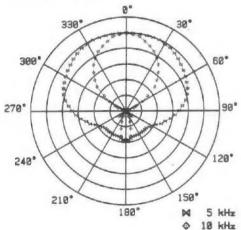
Dimensions.

Height: Diameter: Shank:

7.12 inches (181 mm) 2.05 inches (52 mm) 0.80 inch (20 mm)

#### **POLARS**





#### **OPERATION**

The N/D457 has been specially tuned to provide exceptional off-axis rejection and gain-before-feedback for live "lips-touching" applications. The high- and low-frequency response of the N/D457 is extended in this position, as documented by the specification section. This baffle and proximity effect begins when the microphone is placed within 12 inches of the sound source and increases as the working distance is reduced. The low-frequency response is tailored to provide bass boost without the "boominess" of many directional microphones. Thus, closer working distances can be used with N/D457 to reduce the risk of sound system feedback (ringing) to an absolute minimum while preserving intelligibility.

The dynamic element of the N/D457 will provide reliable operation in humidity and temperature extremes—adverse conditions that would render condenser microphones useless. For years of troublefree operation "on-the-road." the N/D457 utilizes an all-metal-core construction, from the hardened windscreen to the Warm-Grip covered handle.

Patent Pending.

#### **CERTIFIED PERFORMANCE**

Every N/D457 is inspected by a quality-control technician and subjected to a computer-controlled test system that verifies over 80 different performance parameters. After the performance meets or exceeds our rigorous standards, the actual measured frequency response of the unit tested is plotted on a "Certificate of Performance" and included with the microphone. This certificate guarantees that each N/D457 will perform to the exacting standards established by EV design engineers — 100% quality-assurance testing.

### WARRANTY (LIMITED) -

Electro-Voice N/D® Series Microphones are guaranteed against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and material. Other provisions apply; please see warranty card enclosed with microphone, or write for complete details.